

**BEFORE  
THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2018-319-E**

In the Matter of:	)	
	)	<b>APPLICATION OF DUKE ENERGY</b>
Application of Duke Energy Carolinas,	)	<b>CAROLINAS, LLC FOR</b>
LLC for Adjustments in Electric Rate	)	<b>ADJUSTMENTS IN ELECTRIC</b>
Schedules and Tariffs	)	<b>RATE SCHEDULES AND TARIFFS</b>
	)	<b>AND REQUEST FOR AN</b>
	)	<b>ACCOUNTING ORDER</b>

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Pursuant to S.C. Code Ann. Sections 58-27-820 and 58-27-870, and 26 S.C. Code Ann. Regs. 103-303 and 103-823, Duke Energy Carolinas, LLC (“DE Carolinas” or “Company”) hereby notifies the Public Service Commission of South Carolina (the “Commission”) of proposed changes in its rates, charges, and tariffs filed for electric service and respectfully requests that the proposed rates, charges, and tariffs filed with this Application be approved by the Commission. The Company proposes that the rates and charges reflecting the requested increases be effective on June 1, 2019. In support of this Application, DE Carolinas would respectfully show unto the Commission the following:

1. The Commission and the South Carolina Office of Regulatory Staff (“ORS”) were notified on October 8, 2018, as was the South Carolina Department of Consumer Affairs, of the Company’s intent to file this application pursuant to the provisions of S.C. Code Ann. Section 58-27-860.

2. The Company’s general offices are at 550 South Tryon Street, Charlotte, North Carolina, and its mailing address is:

Duke Energy Carolinas, LLC  
P. O. Box 1321 (DEC 45A)  
Charlotte, North Carolina 28201-1006

3. Legal counsel for Duke Energy Carolinas in this proceeding are as follows:

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4. Copies of all pleadings, testimony, orders and correspondence in this proceeding should be served upon the attorneys listed above.

5. DE Carolinas is (1) a limited liability company duly organized and existing under the laws of the State of North Carolina; (2) duly authorized by its Articles of Organization to engage in the business of generating, transmitting, distributing, and selling electric power and energy; (3) a public utility under the laws of the State of South Carolina, and its operations in this State are subject to the Commission's jurisdiction over DE Carolinas' rates, charges, tariffs and terms and conditions of service as generally provided in S.C. Code Ann. Sections 58-27-10 *et seq.*; (4) a public utility under the laws of the State of North Carolina, and its operations in that state are subject to the jurisdiction of the North Carolina Utilities Commission; and (5) a public utility under the Federal Power Act, and certain of its operations are subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC"). DE Carolinas' service area covers 24,000 square miles in Western South Carolina and in the Central and Western portions of North Carolina. The service area includes 62 counties, 18 in South Carolina and 44 in North Carolina. The Company supplies retail electric service to approximately 2.4 million retail customers in its service area. Approximately 591,000 of these customers are in South Carolina. During the twelve month period ending December 31, 2017, DE Carolinas' electric revenues amounted to approximately \$7 billion, of which approximately 24 percent was derived from South Carolina retail jurisdictional customers.

6. The current rates now in effect, excluding riders and changes in the fuel cost component, were approved in Commission Order No. 2013-661, *Order Approving Increase in Rates and Charges and Settlement Agreement*, in Docket No. 2013-59-E (the “2013 Rate Case”). The appropriate test period for purposes of this Application is the twelve-month period ending December 31, 2017 (the “Test Period”).

### **BRIEF SUMMARY OF APPLICATION AND COMPANY’S REQUEST**

7. Recent work to modernize the electric system, generate cleaner power (including exploring nuclear development), responsibly manage and close coal ash basins, improve reliability, and continually improve service to customers has made it necessary for DE Carolinas to request a net base rate increase in its retail revenues of approximately \$168 million,<sup>1</sup> which represents an approximate overall 10 percent increase in annual revenues, to be updated to account for known and measurable expenses for grid investments of approximately \$16 million in 2020 and approximately \$20 million in 2021. This request also includes \$46 million in net tax benefit resulting from the Federal Tax Cuts and Jobs Act (the “Tax Act”), and \$17 million from a reduction in North Carolina state taxes allocable to South Carolina.

8. As proposed, a typical residential customer using 1,000 kWh will see an increase of approximately \$15.57 per month beginning with the rate effective date in this case, requested to be June 1, 2019, and then increased to \$1.54 per month beginning June 1, 2020, and \$1.92 per month beginning June 1, 2021, to incorporate costs for grid investments per the Grid Improvement Plan described below.<sup>2</sup>

<sup>1</sup> The net annual revenue increase includes the impact of the return of deferred income taxes through the EDIT Rider of approximately \$63 million, as discussed below.

<sup>2</sup> The calculation of the bill impacts as of June 1, 2019 reflects a comparison of the fuel cost factors in effect through September 30, 2018 and previously approved in Docket No. 2017-3-E to the most recently approved fuel cost



9. DE Carolinas also proposes modification of certain rate schedules to reflect more accurately its cost of service. The Company proposes an increase in the fixed monthly customer charges to recover the basic fixed cost of providing electric service that is not dependent upon customer usage. DE Carolinas has proposed, supported by costs to serve and consistent with the basic charges in place for many utilities in South Carolina, an increase in the Residential Basic Facilities Charge from \$8.29 to \$28.00 per month effective June 1, 2019. This means that customers would be paying approximately \$0.93 cents per day for facilities in place to serve them, regardless of how much electricity is used. The increase in the Residential Basic Facilities Charge is not additive to the rate increase requested in this case. Rather, this is a change in the manner in which the Company collects its costs. The Company proposes to collect fixed costs through the fixed monthly charge based on the cost to serve instead of the variable, volumetric energy rate. The Company's requested fixed monthly charge is comparable to the fixed monthly charge established by many other electricity providers in the State. More details on the proposed increase in the fixed monthly basic facilities charge may be found in the testimony of Witnesses Hager and Pirro's testimony being filed today along with this Application.

10. Additionally, DE Carolinas proposes modifications of certain outdoor lighting fees and schedules to help modernize the Company's outdoor lighting products and services to reflect the continued adoption of light emitting diode ("LED") technology as discussed in the testimony of Witnesses Cowling and Pirro.

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factors in effect through September 30, 2019 and approved in Docket No. 2018-3-E. The calculation of the bill impacts as of June 1, 2020 and June 1, 2021 reflect the most recently approved fuel cost factors in effect through September 30, 2019 only.

11. The Company's request is driven by capital investments and environmental compliance progress made by the Company since the 2013 Rate Case, including the further implementation of DE Carolinas' generation modernization program, which consists of retiring, replacing and upgrading generation plants, investments in customer service technologies; and the Company's continued investments in base work to maintain the Company's transmission and distribution ("T&D") systems. These investments include the new W.S. Lee Combined Cycle unit (the "Lee CC"); the relicensing effort for the hydro stations on the Catawba-Wateree river basins, and solar generation facilities; Advanced Metering Infrastructure ("AMI," which also include smart meters); the ongoing deployment of the Company's new billing and Customer Information System ("CIS") (known as "Customer Connect"); the Carolinas West Primary Distribution Control Center ("CWPDCC"); environmental costs associated with compliance with new regulations relating to the management and storage of coal combustion residuals, including fly ash, bottom ash, and flue gas desulfurization byproducts; nuclear development work related to the Lee Nuclear Station Units 1 and 2 (referred to as the "Lee Nuclear Project") in Cherokee County, South Carolina; and other costs incurred by DE Carolinas in providing safe, reliable, and high quality power to South Carolina customers.

12. DE Carolinas also proposes, in this Application, its Grid Improvement Plan for approval by the Commission. The Grid Improvement Plan, attached to Witness Oliver's testimony as Exhibit 9 and incorporated herein by reference, is a long-term initiative, and the Company has provided a three-year plan built upon strategic, data-driven investments to improve reliability to avoid outages and speed restoration; harden the grid to protect against cyber and physical threats; expand solar and other innovative technologies across a two-way, smart-thinking grid; and give customers more options and control over their energy use and tools to

save money. As explained by Witness Oliver, these investments will provide benefits now and in the years to come. More details about the Grid Improvement Plan are contained later in this Application.

13. DE Carolinas is also seeking approval to remove its Prepaid Advantage program from pilot status in DE Carolinas by removing the customer cap and making the program available to customers across its entire jurisdiction. Further, as discussed later in this Application, the Company is also requesting that credit card fees be included in rates for residential customers, thereby removing the credit/debit card fee for eligible residential customers enrolling in Prepaid Advantage.

14. Additionally, the Company is seeking a variety of accounting orders in this Application related to ongoing costs for environmental compliance, grid investments between rate changes, incremental depreciation expense and the balance of development costs associated with the cancellation of the Lee Nuclear Project. Finally, the Company seeks approval to establish a reserve and accrual for end of life nuclear costs for nuclear fuel and materials and supplies.

#### **DETAILED INFORMATION ABOUT THE COMPANY'S REQUEST**

15. Major investments in generating plant additions and plant-related expenses, nuclear development work, investments in the grid and meters, based upon the Company's proposed return, as well as a new billing system, account for the majority of the total additional requested annual revenue requirement. Additionally, since its last rate case, DE Carolinas has invested heavily in state-of-the-art technology and environmental equipment to reduce emissions. In particular \$138 million of the annual increase is related to these major

investments, the Lee CC facility,<sup>3</sup> solar generation facilities and the relicensing effort for the hydro stations on the Catawba and Wateree river basins. The Company's request also contains compliance costs associated with state and federal environmental compliance requirements related to Coal Combustion Residuals ("CCR"). In particular, DE Carolinas seeks to recover approximately \$62 million in amortization and return on costs incurred and deferred since January 1, 2015 through December 31, 2018 to comply with federal and state requirements related to CCRs.<sup>4</sup> To mitigate rate impacts to customers, the Company requests to recover these previously incurred expenses over a five year period. This case also includes the amortization of regulatory assets over time related to the Carolinas West Primary Distribution Control Center;<sup>5</sup> smart meters;<sup>6</sup> investments necessary to implement Customer Connect system;<sup>7</sup> the Lee Nuclear

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<sup>3</sup> In Docket 2018-207-E, the Company petitioned for approval to defer into a regulatory asset account costs incurred from the time the facility was placed into service until the time the costs are reflected in the new rates from this proceeding. The costs deferred are the return and depreciation on the capital costs, the associated incremental non-fuel O&M expenses, property taxes and the carrying cost on the deferred costs at the Company's weighted average cost of capital. The Commission approved the Company's petition on August 7, 2018 in Order No. 2018-552 (2018). The Company is seeking recovery of the deferred costs over a three-year period.

<sup>4</sup> Docket No. 2016-196-E, Order No. 2016-490 (July 13, 2016).

<sup>5</sup> In Docket 2018-207-E, the Company petitioned for approval to defer into a regulatory asset account the return and depreciation on the capital costs at its weighted average cost of capital. The Commission approved the Company's petition on August 7, 2018 in Order No. 2018-552 (2018). The Company is seeking recovery of the deferred costs over a three-year period including a net of tax return on the unamortized balance of the regulatory asset.

<sup>6</sup> In Docket 2016-240-E, the Company petitioned for approval to defer into a regulatory asset account incremental operating and maintenance expense and depreciation expense incurred one the AMI meters were installed, as well as the associated carrying costs on the investments and deferred costs at its weighted average cost of capital. The Commission approved the Company's petition on August 7, 2018 in Order No. 2018-552 (2018). The Company is seeking recovery of the deferred costs over a three-year period including a net of tax return on the unamortized balance of the regulatory asset.

<sup>7</sup> In Docket 2018-207-E, the Company petitioned for approval to defer into a regulatory asset account the incremental O&M expense associated with the deployment of the Customer Connect program. The Commission approved the Company's petition on August 7, 2018 in Order No 2018-552 (2018). The Company is seeking recovery of the deferred costs over a three-year period including a net of tax return on the unamortized balance of the regulatory asset.

Project; rate changes from the most recent depreciation study;<sup>8</sup> and ongoing grid improvement investments.<sup>9</sup> Witness Smith provides detail regarding these deferral balances and the requested amortization. Finally, \$65 million represents the revenue requirement on post test year additions, including capital costs, incurred and estimated through December 31, 2018. The costs described herein are partially offset by the return of \$66 million related to reduction of the test period income tax expense as a result of the reduction of the corporate income tax rate.

16. The Company's requested increase is necessary to pay for investments that build a cleaner, more reliable and smarter energy future in South Carolina. Since its last rate case, DE Carolinas has built and purchased additional generating facilities to serve customers. DE Carolinas has invested approximately \$639 million in new gas-fueled generation, replacing older, less-efficient coal-fired generation with state-of-the-art, cleaner burning natural gas-fueled plants. Natural gas plants, including the Lee CC facility, emit carbon dioxide at about half the rate, and nitrogen and sulfur oxide emissions at a fraction of the rate of the units they replaced. The Lee CC facility is providing new jobs and increasing cleaner, reliable energy. Additionally, to advance towards a more sustainable energy future, the Company has added solar facilities to DE Carolinas' generating mix. The Company added two large solar facilities in late 2016 and early 2017 with a total of 75MWs of nameplate capacity providing 35MWs of relative dependable summer capacity. Such projects represent approximately \$152 million of

<sup>8</sup> In Docket 2018-205-E, the Company petitioned for approval to defer into a regulatory asset account the incremental depreciation expense resulting from the new depreciation rates. The Commission approved the Company's petition on August 9, 2018 in 2018-553 (2018). The Company is seeking recovery of the deferred costs over a three-year period.

<sup>9</sup> In Docket 2018-206-E, the Company petitioned for approval to defer into a regulatory asset account costs incurred in connection with grid reliability, resiliency and modernization work in a regulatory asset account until the time the costs are reflected in the new rates from this proceeding. The Commission approved the Company's petition on October 3, 2018. The Company is seeking recovery of the deferred costs over a two-year period including a net of tax return on the unamortized balance of the regulatory asset.

investment. The Company also completed the relicensing of its hydroelectric facilities on the Catawba-Wateree, allowing the sites to operate until 2055, totaling \$126 million in additional investment. More details on these costs may be found in Witness Miller's testimony being filed today along with this Application.

17. This request also seeks cost recovery for costs incurred for the cancelled Lee Nuclear Project, which this Commission was informed of on August 25, 2017 in a letter filed in PSCSC Docket No. 2011-20-E notifying the Commission that DE Carolinas was requesting approval from the North Carolina Utilities Commission ("NCUC") to cancel the Lee Nuclear Project as a predicate to cost recovery in North Carolina. The NCUC has since approved the Company's request to cancel the Lee Nuclear Project pursuant to N.C. Gen. Stat. § 62-110.7(d) in Docket No. E-7, Sub 819.<sup>10</sup> Witnesses Fallon and Diaz explain the background of this project and the reasonableness of the Company's actions. DE Carolinas is seeking to recover \$125 million from South Carolina retail customers over the next twelve years. The annual revenue requirement requested in this proceeding is \$20 million.

18. To bring more value to customers, including giving customers more choice, convenience and control over how they use electricity and how they can save more money, the Company is seeking recovery of its deferred costs<sup>11</sup> and requesting approximately \$4.7 million annually for operating and maintenance costs associated with implementing Customer Connect, which will replace the Company's current CIS system. At 30 years old, the Company's current CIS system is no longer supported or upgradeable, and is unable to continue to be fully integrated into Duke's other systems. The new system will also be complementary to future

<sup>10</sup> On October 18, 2017, the NCUC issued an order consolidating DEC's petition for approval to cancel the Lee Nuclear Project, in Docket No. E-7, Sub 819, with the Company's request for a base rate increase in Docket No. E-7, Sub 1146.

<sup>11</sup> See *supra* n. 4.

technology, and includes the ability to interface with new smart meters to enable customers to more easily start and stop service, ask questions about their bills, view their usage, and allow the Company to identify the optimal rate plan for each customer when asked.

19. To bring customers additional choices and insight on their usage, the Company has implemented AMI across the DE Carolinas system and has replaced conventional meters with smart meters. As fully described in Witness Schneider's testimony, as of September 2018, DE Carolinas has essentially completed its deployment of AMI, installing approximately 590,000 smart meters in its South Carolina service territory. The data enabled by AMI, when combined with the new Customer Connect System referenced in Witness Hunsicker's testimony, will lead to expanded options and flexibility in supporting enhanced customer services and programs. This application requests recovery of the regulatory asset including after the tax return on the unamortized balance for three years, approximately \$15 million of total requested increase.

20. The Company's request also contains compliance costs incurred since January 1, 2015 through December 31, 2018 associated with state and federal environmental compliance requirements related to Coal Combustion Residuals ("CCR"). The Company is requesting recovery of its deferred costs through an amortization expense of \$48 million over 5 years plus a return on the deferred balance of \$14 million for a total annual revenue requirement of \$62 million. Like other utilities around the country similarly affected by such regulation, DE Carolinas has begun the process of closing, or submitting plans to close, ash basins in accordance with these regulations and requirements. Additionally, the Company is adding dry ash and Flue Gas Desulfurization ("FGD") blowdown handling systems to coal-fired plants that are not already so equipped. DE Carolinas is also modifying its entire active and decommissioned coal-



fired plants to divert storm water and low volume waste water away from the basins. The nature of these costs is described in more detail in Witness Kerin's testimony.

21. Additionally, the Company expects to continue to invest significant amounts related to CCR environmental compliance after the December 2018 cut-off in this case. Accordingly, the Company is requesting the Commission approve a continuation of the deferral of CCR compliance-related costs, similar to what it approved in Docket No. 2016-196-E, for costs not included in this case.<sup>12</sup> Specifically, the Company is requesting approval to defer CCR compliance spend related to ash basin closure beginning January 1, 2019, the depreciation and return on CCR compliance investments related to continued plant operations placed in service on or after January 1, 2019, and a return on both deferred balances at the overall rate of return approved in this case. No fines or penalties associated with coal ash basin closure are being sought for recovery in this case. The Company also requests an accounting order related to these costs below.

22. This rate increase is further necessary to enable DE Carolinas to maintain its current financial position in light of those significant capital expenditures undertaken to meet its customers' needs. In addition to modernization of its generating fleet and closing ash basins, the Company is committed to making South Carolina's air and water cleaner by making its grid smarter to further integrate distributed and small source renewables like rooftop solar. The investments described above by the Company to modernize its generation portfolio and electric infrastructure, to comply with certain environmental requirements associated with ash basin closure, to invest in modernizing the Company's CIS systems, among other projects, are not

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<sup>12</sup> *Joint Petition of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC for an Accounting Order to Defer Certain Coal Ash Remediation Costs*, Docket No. 2016-196-E, Order No. 2016-490 (July 13, 2016).



currently reflected in DE Carolinas' rates. As such, the Company's current rates are not providing sufficient revenues for the Company to meet its day-to-day operating expenses and also provide its investors with reasonable returns on their investments of needed capital.

23. The Company needs to be financially sound to continue providing the service customers expect, including making substantial capital investments to replace aging and retired infrastructure, to comply with environmental requirements and to invest in new, more efficient technologies (e.g., digital automated technologies on the grid). The Company is investing heavily in grid infrastructure over the next decade in South Carolina, improving the performance and capacity of the grid, making it smarter and more resilient and give customers greater convenience, control and choice over their electricity usage. Accordingly, the Company needs to remain financially strong in order to make such investments and to continue providing reliable electricity at reasonable rates. Therefore, it is imperative that the Company be attractive to the financial community to access the capital it needs on reasonable terms for the benefit of customers, as explained in detail in the Company's pre-filed direct testimony.

24. The opportunity for the Company's investors to earn a fair and reasonable return on equity will help ensure access to capital markets on reasonable terms. In his pre-filed direct testimony in this case, the Company's cost of capital expert Witness Hevert recommends that DE Carolinas be authorized to provide investors a 10.75 percent return on equity based upon a proposed capital structure containing 53 percent equity and 47 percent debt. The Company fully supports Witness Hevert's testimony and analysis. However, as described in the testimony of Witness Sullivan, as a rate mitigation measure, and in recognition that a rate increase may create hardship for some customers, the Company has proposing setting rates at a 10.50 percent ROE.

25. DE Carolinas' most important objective is to continue providing safe, reliable, affordable, and increasingly clean electricity to customers with high quality customer service, both today and in the future. The Company's systems and programs are complex and are subject to: (a) the continuously evolving needs of its increasingly diverse customer base; (b) ever-increasing federal, state and local laws, regulations and ordinances; (c) the physical demands placed on its systems through extended historic use and natural causes; and (d) the need to invest in this critical infrastructure to power the lives of customers and the vitality of the communities served by DE Carolinas. This proposed rate adjustment is made to support investments that benefit the Company's customers. DE Carolinas strives to ensure that those investments are made in a cost-effective manner that retains the level of service and competitive rates for customers. The Company relies on a variety of fuel sources to generate power and has prudently managed its operating costs. This fuel diversity allows DE Carolinas to choose how to generate electricity – day by day, hour by hour – based on the cost of the fuel needed to run its different plants. DE Carolinas has managed its costs through continuous improvement to its operations (thereby benefitting customers through efficiency-derived controlled costs) as well as through significant cost containment policies and activities described in the Company's pre-filed direct testimony in this case.

26. The Company has committed considerable resources, as explained in the testimony of witnesses in this case, to mitigate the customer impacts of the costs requested for recovery in this case. The Company has donated millions of dollars to assist low-income customers with their electric bills, facilitated customer access and awareness of agencies and programs that can help them pay their bills or manage their ability to maintain electric service, and implemented programs to give customers a variety of payment options. Share the Warmth is

a good example of an assistance program for DE Carolinas customers in need, helping low-income individuals and families cover home energy bills. Over the life of the Share the Warmth program, it has provided approximately \$8.6 million to DE Carolinas' South Carolina customers. Most importantly, DE Carolinas has saved customers' money by operating efficiently and managing costs and its excellent operational performance translates into lower fuel bills and reliable service. The Company also offers optional bill management programs designed to assist eligible customers in either managing fluctuations in their monthly bill or who are having difficulty paying their entire bill by the due date.

27. The Company also remains committed to energy efficiency ("EE") and demand side management ("DSM") programs, as well as innovative rate designs, to allow customers to better manage their electric usage, and as a result, their bills. Through EE, DE Carolinas saves its customers in the Carolinas over 4.3 billion kWh annually, or over \$357 million, which is about 5.4 percent of total retail kWh sales. Combined, its EE and DSM programs offset capacity requirement by the equivalent of more than seven power plants.

28. DE Carolinas' requested rate increase is necessary and justified. The Company strives every day to contain costs and continually apply downward pressure to operation and maintenance expenses so that rate increase requests are no more frequent than necessary. This request reflects investments the Company has made—and is still making—to comply with existing state and federal environmental and other regulatory requirements and to upgrade and modernize its generation and power delivery systems. The Company is also committed to maintaining its operational focus through the proposals included in this case.

### **FEDERAL TAX REDUCTION BENEFITS INCLUDED IN THIS REQUEST**

29. The Company's requested increase includes a proposal to flow back to customers excess deferred income taxes ("EDIT") and deferred revenue resulting from the impact of the federal tax reform legislation, the Tax Act, on utility operations. On December 28, 2017, the Office of Regulatory Staff ("ORS") filed a petition in Docket No. 2017-381-A requesting that the Commission order all investor-owned utility companies to report the impact of the Tax Act on each company's operations. At its April 25, 2018 meeting, the Commission decided that the effects of the Act should be addressed in each utility's next rate case and directed each utility to defer as a regulatory liability (1) all excess accumulated deferred income tax balances created in 2017 by the Tax Act, and (2) the estimated difference between customer revenues actually billed and what would have been billed taking into effect the reduced corporate tax rate beginning January 1, 2018.<sup>13</sup> See Order No. 2018-308 (2018). The balances the Company has accrued are being returned to customers in this case, and reduced by \$40 million to offset the balance accrued for Distributed Energy Resource Program ("DERP") costs that have yet to be recovered and which are typically reviewed within fuel cases.

30. As Witness Panizza explains in his pre-filed testimony being filed today along with this Application, the Tax Act provides the most extensive changes to the internal revenue code in over thirty years and provides the Commission and utilities opportunity to help reduce and smooth out customer rates over the short-and longer-term. However, these benefits to customers should also be balanced with ensuring the Company is able to maintain the same financial strength it had prior to the Act's passage, a financial strength that has helped the Company to keep customers' rates well

<sup>13</sup> Previously, in joint comments submitted by DE Carolinas and DE Progress on January 24, 2018 and April 12, 2018, the companies already committed to establishing deferral accounting for the balances subsequently identified by the Commission.

below the national average. The Company believes its proposal provides appropriate near- and longer-term solutions that will lower customers' bills immediately and help offset future rate increases.

31. One change Witness Panizza discusses from the Tax Act is the reduction in the corporate income tax rate from 35 percent to 21 percent. As described in the pre-filed testimony of Witness Smith, the Company has incorporated into the base rate revenue requirements in this case the reduction in the tax rate. For the remaining benefits of the Tax Act, the Company is proposing to create an EDIT rider to flow back to customers, outside of base rates, the following five categories of benefits to customers: (1) Federal EDIT – Protected; (2) Federal EDIT – Unprotected, Property Plant and Equipment (“PP&E”) related; (3) Federal EDIT – Unprotected, non PP&E related; (4) Deferred Revenue; and (5) North Carolina EDIT. The Company proposes to reduce the balances the Company has accrued in these categories by \$40 million to offset the balance accrued for DERP costs. More information on the Tax Act deferral amounts, less the DERP balances, may be found in the testimony of Witnesses Smith and McGee being filed today.

**REQUEST FOR APPROVAL OF CUSTOMER OFFERINGS FOR PREPAID  
ADVANTAGE AND NO-FEE CREDIT/DEBIT CARD PAYMENTS**

32. The Company's deployment of AMI has enabled new programs to become available to DE Carolinas customers with smart meters, including: (1) Pick Your Due Date, which allows eligible customers to select their desired billing due date from the 1<sup>st</sup> to the 31<sup>st</sup> of the month, better aligning with a customer's needs; (2) Usage Alerts, which provides eligible customers with an alert at the midpoint of their billing cycle; and (3) the Prepaid Advantage program, which will allow customers greater payment flexibility, allowing frequent cash payments which may help customers better manage their finances. Due to the success of Prepaid

Advantage, the Company now proposes, as part of this Application, to commercialize the program, remove it from pilot status, remove the customer cap and make the program available to residential customers across its entire DE Carolinas jurisdiction.

33. Once Prepaid Advantage has been commercialized, the Company will market it to eligible customers through direct mail, other direct channels, as well as through Customer Care Operations. Eligible customers will be able to:

- (1) begin service with a lower up front cost, avoiding a traditional deposit if one would otherwise be required;
- (2) see usage and electricity costs on a daily basis from anywhere via the web or a Smartphone;
- (3) have more choice in payment options, giving the customer the flexibility to determine when to pay and how much based on the customer's lifestyle and receipt of income;
- (4) potentially avoid bill surprises at the end of an unusual weather month; and
- (5) have service reconnected fast through remote capability if service is disconnected.

As discussed in Witness Schneider's testimony, eligible residential customers must make an initial payment of at least \$40 and may not have a past due balance in excess of \$500. No credit check or deposit is required while a customer is a program participant, and there are no minimum payment requirements once the initial deposit amount is met. However, should the customer exit the program and return to a traditional billing schedule, a deposit may again be required. The Company will allow customers with outstanding balances below the maximum to participate and will apportion 25 percent of a given payment amount to outstanding balances, and 75 percent to fund ongoing usage.

34. The Company's request also includes a proposal to offer a fee-free payment program for all payment methods the Company offers, including credit and debit cards, to its

residential customers to pay their electric bill. Currently, customers are required to pay a convenience fee, collected by a third-party vendor, for payments made by a credit or debit card or a one-time Automated Clearing House (“ACH”) payment via phone or on the Company’s website. The Company believes it’s reasonable for residential customers to not pay a convenience fee for payments made through any of its payment channels. The requirement to pay a convenience fee when making a payment is one of the largest frustrations customers experience. Customers have grown accustomed to paying for other products and services with a credit or debit card without a separate, additional fee. Therefore, to offer this program, the Company proposes to pay these costs on behalf of its residential customers and recover these costs as part of its cost of service. More details on the Company’s proposal are included in the pre-filed direct testimony of Witnesses Gharthey-Tagoe and Smith.

#### **GRID IMPROVEMENT PLAN**

35. The Company also proposes, in this Application, its Grid Improvement Plan for approval by the Commission. The Grid Improvement Plan is a long term initiative, and the Company has provided its three-year plan built upon strategic, data-driven investments to improve reliability to avoid outages and speed restoration; harden the grid to protect against cyber and physical threats; expand solar and other innovative technologies across a two-way, smart-thinking grid; and give customers more options and control over their energy use and tools to save money. The Company proposes additional rate changes for 2020 and 2021 to reflect the remaining years of the three year plan, with costs captured in a regulatory asset for recovery between rate changes. As explained by Witness Oliver, these investments will provide benefits now and in the years to come.

36. From routine, day-to-day activities to powering high-tech manufacturing, the electric power grid is the backbone of South Carolina's digital economy; – not just today, but also 5, 10, 20 years in the future. As recent events have reinforced, the Company must be ready for severe weather before it strikes, and reduce the impact of storms that are worsening in frequency and intensity. DE Carolinas must be vigilant and prepare now for the very real threat of cyber and physical attacks. DE Carolinas also need to provide more options for customers to allow more control over the way they use electricity. And as renewable energy technologies like solar energy, battery storage, micro-grids and electric vehicles become more affordable and accessible; the Company needs to take steps now to ready the grid to support the growth of these technologies that are important to South Carolina's energy future.

37. The Grid Improvement Plan addresses all of these needs, while also managing costs. This Grid Improvement Plan was built using advanced data analytics that helped identify strategic opportunities for improvement. It also incorporates extensive input from customers, customer and advocacy groups and others who helped to refine this plan to better serve their energy needs and the needs of our state. The Grid Improvement Plan includes investments designed to strengthen the grid and mitigate the impact of major storm events, as well as to harden and defend the grid against critical physical and cybersecurity risks. Examples of the Company's multi-layered improvements designed to protect the grid include: updating grid technology including monitoring and communication equipment; installing protective devices to limit access to critical systems and minimize outages from physical or cyber-attack; and relocating, raising or reinforcing equipment in flood-prone areas.

38. The Grid Improvement Plan also helps modernize the grid. Technology is rapidly changing, and the Company must do more to incorporate and anticipate new technology to better



serve a growing state. Customers deserve the same options from their electric utility that they can receive from other service providers, such as self-selecting billing and payment dates, scheduling appointments, and accessing real-time usage data and information updates when outages occur. These are all examples of basic services consumers expect but require technology to deliver. And increasingly, consumers desire access to information about how they use energy and tools to take control of that energy use and save money. Examples of improvements designed to modernize the grid include: distribution automation and dispatch tools to improve power quality and reliability, and support the growth of distributed energy resources and customer-owned technologies, integrated system operations planning, automation and system intelligence, to prepare the grid for increased distributed resources and the dynamic power flows that these technologies bring. These technologies, proposed in the Grid Improvement Plan, will interact with Smart Meters to bring our service into the 21<sup>st</sup> century.

39. The Grid Improvement Plan optimizes the total customer experience and transforms the grid to prepare it for the energy opportunities that lie ahead. Optimization upgrades in the grid improvement plan include: a self-optimizing, smart-thinking grid that anticipates outages and automatically reroutes service to keep power on for customers. Self-optimizing technology can reduce outage impacts on customers by as much as 75 percent. It will also provide the foundation for the two-way power flows needed to support more rooftop solar, battery storage, electric vehicles and microgrids – technologies that will increasingly power the lives of customers. Investments also include expanded energy storage capabilities and infrastructure, which will help to power self-optimizing technologies in areas where building a redundant power line may not be feasible. It includes additional electric vehicle charging infrastructure improvements to expand transportation options for customers across the state, as

well voltage optimization and distribution of power to customers to improve reliability, increase system intelligence and support the two-way power flow needed to grow distributed resources.

40. In addition to these improvements, the Company must also have the right skill sets available at the scale necessary to bring about this important transformation. That means recruiting thousands of new contractors and employees, expanding training for the existing workforce and thinking ahead to future needs.

41. To provide better visibility regarding the Company's plans and investments, the Company has undertaken Grid Improvement Plan Workshops with interested stakeholders, and those conversations have informed the Company's request. One of the requests from these workshops is to have investments considered by the Commission. Accordingly, the Company proposes a three-year view of its Grid Improvement Plan, as incorporated by reference from the testimony of Witness Oliver, including projects and investments for the Commission's approval, as well as a multi-year rate plan that allows for pre-defined, step-up rate changes for grid investments in Year 2020 (Phase 1) and Year 2021 (Phase 2) to correspond with the annual progress on the Grid Improvement Plan in each year. After such time, the Company would file another rate case, repeating the process for Commission consideration for future investments for grid investment. The proposed Phase 1 and Phase 2 rate changes will best support the Company's cash flows as it implements the grid improvements detailed in the Grid Improvement Plan. Additionally, the Company is willing to file quarterly status reports to apprise stakeholders of the progress made on the Grid Improvement Plan. The Company also commits to a 60-day audit, during which time the ORS and interested parties could review the costs incurred relative to the Grid Improvement Plan ultimately approved in this case. The Company proposes to file the information for the prior year for auditing purposes by March 1, 2020 and March 1, 2021, as

explained in further detail by Witnesses Smith, to allow for such audit, as well as notice and the opportunity for hearing if requested by an interested party.

42. To facilitate the transition to LED outdoor lighting products, the Company proposes, in this Application, to lower the outdoor lighting transition fees charged to customers who move from metal halide (“MH”) and high pressure sodium (“HPS”) to LED; close mercury vapor (“MV”) and incandescent outdoor lighting products on Schedule SL, which serves Greenwood customers, due to technology obsolescence; re-open Schedule PL and merge Schedule GL, which also serves governmental lighting customers, into Schedule PL to improve tariff administration; close HPS fixtures to new installations to lessen the impact on net book value; and close Schedule NL, which is a pilot tariff designed primarily to introduce LED technology, and to discontinue Schedule FL and merge it into Schedules OL and PL. As explained in Witness Cowling’s testimony, LED outdoor lighting products are generally preferred by customers as they offer significantly reduced energy use, exhibit longer lifetimes, do not contain mercury, and provide a high color quality, which provides better illumination. Thus, the industry is moving away from HID outdoor lighting products such as MV, HPS and MH, and moving towards LED technology.

#### **REQUEST FOR ACCOUNTING ORDER**

43. As part of this Application, the Company requests an accounting order for approval to: (i) continue the deferral for coal ash basin closure compliance costs after the cut-off date for this rate case of December 31, 2018; (ii) establish a regulatory asset to recover the balance of development costs associated with the cancellation of the Lee Nuclear Project; (iii) adopt new depreciation rates effective August 1, 2018, and defer in a regulatory asset the incremental depreciation expense resulting from the new depreciation rates, if and as approved

by the Commission; (iv) continue the deferral for ongoing Grid Improvement costs to be recovered using Phases 1 and 2 rate changes in accordance with the Company's three-year rate plan, or if the Commission does not approve Phases 1 and 2 rate changes then, in the alternative, it approve the deferral of ongoing Grid Improvement costs until the Company's next rate case; and (v) establish reserves for end of life nuclear costs and to begin accruing for the expense related to materials and supplies and a portion of the last core of nuclear fuel in the reactor at the end-of-life of its nuclear generating plants.

44. DE Carolinas requests an accounting order for the continued deferral of coal ash basin compliance costs after the December 2018 cut-off in this case. The Company is requesting the Commission approve a continuation of the deferral, similar to what it approved in Docket No. 2016-196-E for costs not included in this case. Specifically, the Company is requesting approval to defer CCR compliance spend related to ash basin closure beginning January 1, 2019, the depreciation and return on CCR compliance investments related to continued plant operations placed in service on or after January 1, 2019, and a return on both deferred balances at the overall rate of return approved in this case.

45. As a result of the cancellation of the Lee Nuclear Project, the Company is requesting permission to establish a regulatory asset consisting of the balance of development costs adjusted to remove non-depreciable land costs, and estimated expenditures through May 31, 2019. The Company is requesting recovery of the regulatory asset over a 12-year period.

46. DE Carolinas requests approval to (1) adopt new depreciation rates effective August 1, 2018 and (2) to establish a regulatory asset to defer the incremental depreciation expense resulting from the new depreciation rates, if and as approved by the Commission. As explained in the pre-filed testimony of Witness Doss, on June 22, 2018, the North Carolina

Utilities Commission issued an order in Docket No. E-7 Sub 1146 approving DE Carolinas' depreciation rates based on the rates set forth in the original, with specific adjustments. The Company incorporated these adjustments in a revised study, which resulted in an approximate annual increase in depreciation expense of \$40 million on a system basis (\$10 million on a South Carolina retail basis) when applied to end of 2017 plant balances. DE Carolinas respectfully requests that the Commission issue an accounting order approving the depreciation study and adopting and implementing the new depreciation rates, which includes the aforementioned adjustments. In addition, the Company is seeking permission to establish a regulatory asset to defer the incremental depreciation expense resulting from the new depreciation rates, if and as approved by the Commission. The costs the Company seeks to defer are approximately \$9 million on a South Carolina retail basis, estimated through May 31, 2019. The deferred costs to be recorded on the Company's accounting records will be based on actual costs. The Company proposes to amortize the regulatory asset over a three year period.

47. DE Carolinas also requests an accounting order for approval to defer costs associated with the incremental grid investments placed in service after December 31, 2018, until those costs are included base rates, either through the Phase 1 or 2 rates or a subsequent general rate case, incurred in connection with the Grid Improvement Plan. Specifically, the Company seeks to defer the incremental O&M, depreciation expense and property taxes associated with the capital assets installed as part of its Grid Improvement Plan, as well as the carrying cost on the investment and on the deferred costs at the Company's weighted average cost of capital. The Company proposes to recover the deferred costs in accordance with its proposed three-year rate plan request, allowing for pre-defined rate changes, Phases 1 and 2, for these investments in 2020 and 2021, respectively. For any costs not included in the Phase 1 or Phase 2 rate changes,

the Company to defer these costs until its next rate case. In the alternative, if the Commission does not approve the Company's three-year rate plan request, the Company asks the Commission to approve the ongoing deferral of Grid Improvement Plan costs until the Company's next rate case. Without this accounting treatment, costs incurred for grid improvement will negatively impact the Company's financials on a project by project basis since they would not be captured in rates, and unlike capital projects of similar financial magnitude, the Company's will not have the opportunity to fully capture these costs absent the requested deferral.

48. Finally, DE Carolinas requests an accounting order for approval to establish a reserve for end of life nuclear costs. Currently, there are some end-of-life costs at a nuclear plant that are not captured in a decommissioning study (e.g., the expense to write off the materials and supplies in inventory at the time of decommissioning that have little or no salvage value). The Company is proposing to create a reserve to start accruing for these end-of-life expenses and, therefore, create a better matching of cost and benefit for ratemaking purposes. The annual accrual amount will be determined by dividing the projected inventory balance at the end of each unit's life by the number of years remaining in the unit's life and summing this result for the Company's three nuclear plants. In this proceeding, the Company is requesting an annual accrual amount of approximately \$5 million as allocated to South Carolina retail. The annual accrual amount can be reviewed and adjusted, if needed, in each future general rate case before the end of the plant's life. The Company is also proposing to create a reserve to start accruing for the expense related to a portion of the last core of nuclear fuel in the reactor at the end-of-life of its nuclear generating plants and, therefore, create a better matching of cost and benefit for ratemaking purposes. The annual accrual amount will be determined by dividing the projected remaining value of the last core of nuclear fuel at the end of each unit's life by the number of

years remaining in the unit's life and summing this result for the Company's three nuclear plants. In this proceeding, the Company is requesting an annual accrual amount of \$2 million as allocated to South Carolina retail. The annual accrual amount can be reviewed and adjusted, if needed, in each future general rate case before the end of the plant's life. The reserves, once they are created, will be included as an offset to rate base in the cost of service.

### REQUESTED RATES

49. Copies of the rates now in effect are attached as **Exhibit A**. The proposed schedules of rates and charges, attached to this Application as **Exhibit B**, are filed in accordance with the provisions of S.C. Code Ann. §§ 58-27-860, 865, 870. The proposed rates set forth in **Exhibit B** include a base combined fuel, environmental and the Public Utility Regulatory Policies Act ("PURPA") purchased power capacity cost factors of 1.8769 cents per kWh for the residential class, 1.8639 cents per kWh for the general service/lighting class, and 1.8161 cents per kWh for the industrial class.<sup>14</sup> These base combined fuel, DERP Avoided Capacity and PURPA Avoided Capacity cost factors are not being adjusted in this case and are equal to the total of the fuel and environmental cost factors by customer class approved by the Commission in Docket No. 2017-3-E as well as all other riders approved by the Commission. The rates set forth in **Exhibit B** are designed to increase annual revenues from South Carolina retail operations by a net amount of approximately \$168<sup>15</sup> million or a 10 percent average increase in rates, based on the test year of the twelve month period ending December 31, 2017 adjusted for known changes. The proposed revenue increase is distributed among classes of customers by

<sup>14</sup> Due to timing, these rates exclude the effect of gross receipts tax, utility assessments and were calculated using the base fuel cost factors approved in Docket No. 2017-3-E and effective October 1, 2017 through September 30, 2018; as the effects of fuel are netted, this does not affect the revenue requirement being requested in this Application.

<sup>15</sup> The net annual revenue increase includes the impact of the return of excess deferred income taxes through the EDIT Rider of approximately \$62 million.

increasing the rate schedules as follows: 12.1 percent for the residential class, 8.8 percent for the general service/lighting class, and 4.1 percent for the industrial class. The different percentage increases for customer classes reflect the allocation of the rate increase based on the overall rate of return. The Company proposes to modify certain rate schedules to reflect more accurately the cost of service and to consolidate and cancel certain rate schedules.

50. The rates set forth in **Exhibit A** are unjust and unreasonable because they do not allow the Company the opportunity to earn a fair rate of return. In Order No. 2013-661, the rates were set based on a 10.2 percent return on common equity. The overall rate of return on rate base was set at 7.89 percent. During the twelve month period ended December 31, 2017, as adjusted for known changes, the rate of return on South Carolina retail rate base, as shown on **Exhibit C**, was only 4.07 percent.

51. The exhibits attached to this Application are as follows:

- **Exhibit A.** The schedule of the Company's electric rates and charges in effect and on file with the Commission at the time of filing this Application, which the Company seeks to increase.
- **Exhibit B.** The schedules of electric rates and charges the Company proposes to put into effect on June 1, 2019.
- **Exhibit C.** Current tariffs highlighting all changes requested in the proposed schedules.
- **Exhibit D.** The financial data for the 12-month period ended December 31, 2017 filed in compliance with 26 S.C. Code Ann. Regs. 103-823.
- **Exhibit E.** The schedules of Phase 1 and Phase 2 rate changes to reflect rate changes to recover known and measurable costs being incurred for the proposed Grid Improvement Plan.

DE Carolinas proposes that all accounting and pro forma adjustments set forth in the attached exhibits be adopted in this proceeding for ratemaking and reporting purposes.



WHEREFORE, DE Carolinas requests the Commission approve the electric rates and charges filed as **Exhibit B**, effective June 1, 2019, as indicated in the tariffs filed in this case, as well the rates filed in **Exhibit E**, effective 12 and 24 months subsequent to the rates and charges in **Exhibit B** going into effect; that the Commission approve the Company's accounting order and program approval requests described in this Application; and that the Commission grant DE Carolinas such further, different, or other relief as may be just and reasonable.

This the 8th day of November, 2018.

  
Heather Shirley Smith  
Deputy General Counsel  
Duke Energy Corporation  
40 W. Broad Street, Suite 690  
Greenville, South Carolina 29601  
Phone: (864) 370-5045

# VERIFICATION

STATE OF SOUTH CAROLINA    )  
  )  
COUNTY OF GREENVILLE    )

KODWO GHARTEY-TAGOE, being first duly sworn, deposes and says:

That he is President of Duke Energy Carolinas-South Carolina; that he has read the foregoing Application, and knows the contents thereof; that the same is true as to matters stated therein on information and belief, and as to those matters he believes it to be true.

  
Kodwo Gharthey-Tagoe

Sworn to and subscribed before me

This 6<sup>th</sup> day of November, 2018.

  
Notary Public

My Commission Expires: 8-27-2028



Jacqueline Wilson  
NOTARY PUBLIC  
State of South Carolina  
My Commission Expires  
August 27, 2028